

Allowable Subject Matter

Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Applicant, however, holds in abeyance the rewriting of these claims in independent form until the Examiner has had a chance to consider the remarks below with respect to claim 1.

Claim Rejection Under 35 U.S.C. § 103

Claims 1-8 and 11-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwashita (5,467,001) in view of Mori (JP 06-225573). Applicant respectfully traverses this rejection of independent claim 1 at least because the combination of Iwashita and Mori does not teach or suggest all of the claim's recitations. For example, the combination of Iwashita and Mori does not teach or suggest the claimed motor control device having a motor current limit value calculating section for providing a motor current limit value that is an integrated value of a predetermined function of the phase current of the motor *to act as an index of power consumption*.

The Examiner acknowledges that Iwashita does not disclose a motor current limit value calculating section for providing a motor current limit value that is an integrated value of a predetermined function of the phase current of the motor *to act as an index of power consumption*. Therefore, the Examiner looks to the current control section 6 of Mori's vector controller for an induction motor in an attempt to make up for this deficiency. However, Mori's control section 6 cannot correspond to the recited motor current limit value calculating section. That is, Mori does not disclose integrating the phase current of the motor to act as *an index of power consumption*.

Mori discloses a vector controller for an induction motor having a current control section 6¹ with proportional integration control means 6a and 6b that provide two-phase voltage commands V_O , V_T .² The voltage commands V_O , V_T are calculated based on proportional-plus-integral values of the torque current command I_{TS} , the exciting-current command I_{OS} , and the current detection values I_{OFB} and I_{TFB} .³

However, the command V_O cannot be considered as *acing as an index of power consumption* because the proportional-plus-integral value of the torque current V_O is based in part on the exciting-current command I_{OS} ,⁴ which is a not based on a motor phase current. Moreover, the command V_T also cannot be considered as *acing as an index of power consumption* because the proportional-plus-integral value of the torque current V_T is not based on a motor phase current. Instead, the torque current V_T is based in part on the torque current command I_{TS} , which is a function of a detected motor speed value.⁵

In contrast, the motor current limiting value section of the exemplary embodiments of the invention shown in Figs. 1, 7, and 8 of the present specification act as an index, or indication, of power consumption because they are functions of the phase currents i_u and i_v .

¹ See Mori at Fig. 3 (The Examiner has repeatedly referred to Fig. 9 of Mori as disclosing the features shown in Fig. 3, such as the reference numerals 1-12).

² See Mori at Figs. 1 (The Examiner has repeatedly referred to Fig. 6 of Mori as disclosing the features in Fig. 1, such as 6a-6f).

³ See Mori at Fig. 1.

⁴ See Mori at Fig. 1.

⁵ See Mori at Fig. 3.

RESPONSE UNDER 37 C.F.R. § 1.111
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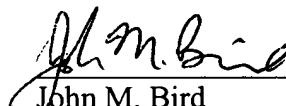
As such, Applicant respectfully submits that independent claim 1 is patentable at least for the reasons discussed above. In addition, Applicant respectfully submits that dependent claims 2-20 are patentable at least because of their dependency from claim 1.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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